

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



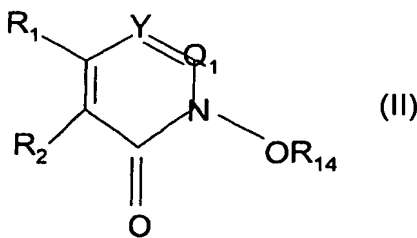
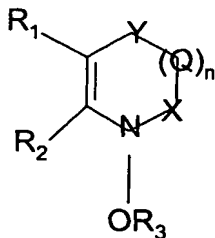
(43) International Publication Date
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number
WO 2005/042562 A3

- (51) International Patent Classification?: **C07F 9/09**
- (21) International Application Number:
PCT/US2004/036428
- (22) International Filing Date:
1 November 2004 (01.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/516,167 30 October 2003 (30.10.2003) US
- (71) Applicant (for all designated States except US): **THE UNIVERSITY OF MASSACHUSETTS** [US/US]; Amherst, MA 01003-4510 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CARPINO, Louis, A.** [US/US]; 11 Mount Pleasant, Amherst, MA 01002 (US). **XIA, Jusong** [CN/US]; 509 Bernndary Court, Moore, SC 29369 (US). **ZHANG, Chongwu** [CN/US]; 503 Yarrow Circle, Dayton, NJ 08810 (US). **SFERDEAN, Calin, Dan** [RO/US]; 286 Sunset Avenue, 308 Prince House, Amherst, MA 01003 (US).
- (74) Agent: **GROLZ, Edward, W.**; Scully, Scott, Murphy & Presser, 400 Garden City Plaza, Garden City, NY 11530 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:
21 July 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NEW COUPLING AGENTS FOR PEPTIDE SYNTHESIS



(57) Abstract: The present invention is directed to compounds of the formula (I) and (II) or salts thereof or N-oxides and their use in peptide synthesis.

WO 2005/042562 A3